

A new road and rail link from the mountains to the coast: the mixed legacy of Sochi's most expensive project

For Mega-Events: Placemaking, Regeneration, and City-Regional Development

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Introduction: life after the games

It is nearly five months after the 2014 Winter Olympics and Saak Karapetyan¹, who lives about 15km up from the Black Sea coast in the small village of Akhshtyr, needs to do the family shopping. He and his wife, Anna, climb into their Niva 4x4 and drive down the mountain. At first it is a bumpy dirt road, but soon it becomes graded and then concrete. A yellow pipe snakes alongside the road as they descend, giving villagers the option to connect to municipal gas for the first time. Once they descend into the valley, the road terminates at a high gravel platform guarded with fences and barbed wire. On top are the rails for the new *Lastochka* train, and parallel beyond them runs the New Krasnaya Polyana Highway – Krasnaya Polyana being the site of the mountain cluster of Olympic venues. Both road and rail were built for the Olympics, augmenting the original arterial road running from mountains to coast. Saak and Anna turn left to drive alongside the high tracks. They are heading down to

¹ Names and identifying details have been changed to maintain anonymity.

the market on the coast in Adler but this is not a simple journey. The nearest onramp to the new highway is almost 10km south of their village – technically about two thirds of the way to their destination. There is no southbound onramp, however, so it is only possible for them to travel north. In theory, they could take the new highway north, at the first opportunity cross the river, and then turn south again to use the original arterial road toward the coastal cluster of Olympic venues. Instead of this circuitous route, they pass the limited onramp and continue on what they call “the old road”, which rapidly decreases in quality. They weave around potholes and rockslides, rarely losing sight of the inaccessible new highway and the *Lastochka* train that, only once, whizzes by on its way to the resorts in the mountains.

The Sochi region received unprecedented investment during the run-up to the 2014 Olympics. Costing a record \$55 billion (approximately 1.5 trillion rubles), this seven year period is better understood not merely as preparation for a sporting celebration but rather as an ambitious urban and regional development project with the world’s most prestigious mega-event attached (Golubchikov, 2017; Müller, 2014). Aside from building the competition venues, this preparatory project involved overhauling the region’s transit infrastructure, a huge development push that included building or reconstructing over 360km of roads and 200km of railways (OlympStroy, 2013). Although construction work took place all over the Sochi region, the two clusters of Olympics venues – one on the coast and the other in the mountains about 45km away – can be considered the epicenters of development attention (see map 1). The New Krasnaya Polyana Highway and the *Lastochka* train were built to link these two clusters, simultaneously fulfilling Olympic transport requirements and improving upon the existing connection provided by the original arterial road. If anyone in Sochi

were to benefit from improved transit infrastructure, surely it must be those, like the Karapetyans in Akhshtyr, who live in between these major sites of Olympic development. Instead, the results for locals living alongside this transit corridor are more mixed and spatially uneven. This chapter explores these mixed results and investigates the effects on some of the people who live between the Olympics clusters. It spotlights Sochi's most expensive transport infrastructure intervention and, in focusing on the legacy period after the Olympics, it examines the government's promises of development and regeneration and explores the degrees to which these promises were fulfilled. The chapter looks beyond issues of cost, corruption, and opaque ownership structures to explore the micro-level of what has happened to the people who are living in the aftermath of this Olympic development project.

Mega-events, urban regeneration, and Sochi.

Mega-events like the Olympics and the World Cup are about more than sport, and hosting them creates profound social, political, economic, infrastructural, and environmental impacts for the host nation, region, and city (Horne and Manzenreiter, 2006; Toohey and Veal, 2007). One of the most common motivations for hosting is to leverage the increased attention and investment that accompanies the mega-event in order to undertake major urban development or regeneration projects in the host city (Coaffee, 2010; Essex and Chalkley, 1998; Gold and Gold, 2016; Hiller, 2000; Poynter et al., 2015). Perhaps the most famous example of mega-event-led regeneration is the 1992 Summer Olympics, which helped transform industrial Barcelona into a world-class tourist destination, albeit at higher costs than promised and with accompanying gentrifications and population displacement (Baade and Matheson, 2016; Brunet, 1995; COHRE, 2007). Since then, the so-called "Barcelona

Model” has been deployed as a rationale for mega-event hosting worldwide, either implicitly or explicitly, in both emerging and established economies. Hence, English organizers attempted to catalyze an ambitious transformation of the relatively deprived areas of East London in the 2012 Summer Olympics, though this was not without gentrification processes and other exclusionary effects (Poynter et al., 2015; Watt, 2013). Similarly, Brazilian elites used the World Cup and the Olympics in Rio de Janeiro to engage in radical stadium-led urban redevelopment, accelerating transformations of the city to cater to the international tourist class. At the same time, Rio’s socio-spatial transformations unleashed gentrifications across the city’s residential areas and exacerbated the exclusions of the marginalized and the poor (Gaffney, 2015, 2010). Sochi 2014 continues this pattern of planning rationales, as organizers married mega-event hosting to a wide-ranging program of urban and regional development.

Alongside their local goals for urban development or regeneration, mega-event planners must also complete a variety of infrastructural projects in order to satisfy hosting requirements. These are strict, contractually regulated, and verified by periodic visits from the event owner (in the case of the Olympics, the International Olympic Committee). Among many other requirements, host cities must provide problem-free transport for a variety of client groups, ensuring efficiency, safety, throughput capacity, punctuality, and reliability (International Olympic Committee, 2016). Transport improvements are commonly cited as one of the positive long-term impacts of hosting and generally escape the controversy that tends to accompany other mega-event-led developments (Cashman, 2006; Kassens-Noor, 2013a; Preuss, 2004). Indeed, when executed in concert with the region’s development goals,

investments in transport can provide long-lasting benefits for the region and tend to escape the “white elephant” curse of oversized infrastructure that is unneeded after the games (Bovy, 2010; Kassens-Noor, 2012).

Like other mega-events, hosting the Winter Olympics requires substantial investments into transport infrastructure like airports, roads, and railways in order to accommodate the size of the event as well as to allow for the unpredictability of winter weather. However, when compared to other mega-events, the Winter Games tend to be hosted by smaller cities. So, after massive upgrading, they are often left with oversized infrastructure. Further, because they are hosted in more rural areas, there is a higher risk of construction projects damaging the natural environment (Chappelet, 2008). At the same time, there is also the possibility that hosting could provide long-lasting enhancements to transport infrastructure, particularly in hard-to-reach mountainous areas (Essex and Chalkley, 2004). The primary challenge is to balance the short-term needs of the event – managing extremely high traffic for a limited time – with the longer-term needs of the host city, which usually does not need such high-capacity transport networks. It is therefore particularly risky for smaller cities, with their comparatively smaller overall needs, to host the Winter Olympics.

In this light, the Sochi 2014 provides a study in extremes. First is the issue of cost, though it is not unusual to see cost overruns for mega-events: since 1960, the Summer Olympics have run an average of 176% over budget, while the Winter Olympics have broken budgets by an average of 142% (Flyvbjerg et al., 2016). Nor is it surprising that transport construction projects tend to break budgets (Cantarelli et al., 2010; Flyvbjerg et al., 2004, 2003). Notwithstanding these tendencies, the Sochi Olympic

road and rail project shatters records. The combined project cost between \$8 and \$10 billion (285 billion rubles), making it one of the world's most expensive construction projects, and the railway alone boasts the highest per-kilometer costs worldwide (Anti-Corruption Foundation, 2014; Müller, 2014). The project was majority funded by the federal government, managed by state-owned Russian Railways, and executed by contractors connected to influential politicians. Part of the reason for the project's exorbitant costs was the terrain: there were substantial engineering challenges involved in constructing the road and rail in and alongside the Mzymta river, as well as building 46 new bridges and drilling twelve new tunnels through the Caucasus mountains (Sochi 2014 Organizing Committee, 2015). Another factor was a profiteering phenomenon in mega-event development where unscrupulous contractors delay construction in the context of the fixed event deadline in order to secure higher rents (Baade and Matheson, 2015; Müller, 2015). On top of this, Russia's issues with corruption and neopatrimonial rent distribution also exacerbated the costs, though it is difficult to know the extent of this problem due to the opacity of the relationships in question (Wolfe and Müller, 2018).

Financial burdens aside, however, there also are questions of usage. Operations during the event went smoothly, and both road and rail managed the high demands of Olympic passenger transit between the clusters. 38 *Lastochka* trains regularly sped – as the Russian name suggests, like a flock of swallows – between the mountains and the coast, and 963 buses ran between venues on 15 routes with wait times between two and five minutes (Sochi 2014 Organizing Committee, 2015). Spectators traveled for free by presenting their visitor's badge (a security feature that accompanied ticket purchase) and Sochi's normally bottlenecked streets were clear for the duration of the

Games. This traffic-free situation was not only a result of upgrading city roads and highways, however, but rather brought about by instituting a new traffic management regime. Authorities temporarily removed crosswalks, shut off traffic lights, established dedicated Olympic travel lanes, and required residents to apply for permits to drive during the event (Petrova and Myazina, 2013). Similar traffic reduction strategies have been employed effectively not only in Russia, but also by organizers in many host cities, including London, Athens, and Sydney. Inconveniences like these are often standard fare for host city residents, and typically their complaints are assuaged by the knowledge that the event is temporary and that the long-term benefits should be worth the short-term pain.

Transport infrastructure functioned smoothly during the Olympics, but what was the situation for residents after the games left? This chapter is an attempt to address this question, as well as to help alleviate the lack of studies centering on the post-event period. It relies on documents and reports from the Russian Federal Government, the Sochi 2014 Organizing Committee, Olympstroy (the Russian state-run Olympic delivery agency), and the International Olympic Committee, as well as speeches and press releases from politicians and businesspeople involved in the production and delivery of the Games. It also uses materials from organizations and media not directly involved with the Olympics, such as the Anti-Corruption Foundation, the World Wildlife Fund, Vedomosti, and Novaya Gazeta, as well as academic literature on mega-events in general and Sochi in particular. Finally, the chapter draws on fieldwork in Sochi from 2007 – 2017, including regular episodic interviews with 22 residents in villages along the Mzymta River.

What's in it for Sochi?

There were numerous motivations for hosting the Winter Olympics in Sochi, set out in the Russian bid to the International Olympic Committee and the Russian federal government's guiding document to develop Sochi (Russian Federal Government, 2006; Sochi 2014 Organizing Committee, 2006). There were three overall goals: to provide winter sports venues for elite Russian sport, to establish the region as a world-class winter tourist resort, and to increase the nation's prestige in both domestic and international contexts.

To expand on these motivations: after the collapse of the Soviet Union, Russia was left with no domestic training facilities for many of its winter athletes. Constructing domestic venues would allow Russian athletes to train at home rather than hiring facilities abroad. It also was intended to give the nation the ability to host both Russian and international sports championships in the future. At the same time, this massive infrastructure development would transform Sochi – already long established as a summer seaside resort – into a world-class winter destination (Putin, 2007). In concert with a modernized urban environment, the tourist economy could function year round and thus improve quality of life for the local population. This project signaled an active reentry of the federal state into regional and urban development, though accompanied with significant human, environmental, and financial costs (Golubchikov, 2017). Finally, there was also a goal to reframe perceptions of the nation, presenting Russia as “Great, New, Open!” – a slogan emblazoned at the entry to the Olympic park and on billboards and posters around the country. The federal government's ambitions for this image project were mostly achieved in domestic contexts but failed to change western attitudes towards Russia (Wolfe, 2016). These

hosting motivations can be understood as broad promises for regeneration: of sporting facilities, of infrastructure overall, of the regional economy, of domestic conceptions of national identity, and of international perceptions of the country as a whole.

One of the challenges in accomplishing the infrastructure aspects of this multifaceted regeneration was due to Sochi's natural environment, which is home to a variety of rare and endangered flora, and protected by a slew of national and international laws. The coastal cluster of Olympic venues was sited on the Black Sea shore, whose cleanliness is vital to the continued tourist attractiveness of the region. The mountain cluster was situated within the Sochi National Park, the only undisturbed mountain forest in Europe, adjacent to the Caucasus Nature Reserve, and protected as a UNESCO natural world heritage site. The Sochi Winter Olympic construction project was deployed in this environment, erecting each of the eleven sports venues from scratch, building an entirely new city in the mountains, and linking these developments with existing settlements via extensive transport links. Taking cues from the International Olympic Committee's Agenda 21 (IOC, 1999), which suggested guidelines for hosting sustainable games, the Sochi 2014 Organizing Committee set out to build what they called the "Games in Harmony with Nature" (Sochi 2014 Organizing Committee, 2006). The goal was to "minimize, and when possible eliminate negative environmental impacts in Sochi during the construction and operation of Olympic venues and infrastructure" (Sochi 2014 Organizing Committee, 2015, p. 50). In the bid, organizers promised to enhance and increase the size of Sochi's environmental preserves, among numerous other ecological commitments. When the United Nations Environment Program expressed concern that the bobsled and luge facilities were planned within protected environments, Sochi

2014 organizers altered their plans and relocated the developments, earning international praise for their commitment to green games (UNEP, 2008). These green standards were intended to catalyze a sustainable building revolution across Russia and, to some extent, this has indeed come to pass in the post-Olympic period (Telichenko and Benuzh, 2014).

In many instances, however, these environmental aspirations conflicted with the broader infrastructural goals of the Sochi project. As construction progressed it became clear to many Russian and international ecologists and observers that the project's much-touted ecological standards were being violated, leading to claims that the organizers' gestures towards the environment amounted to image politics and greenwashing (EWNC, 2011a; O'Hara, 2015). Construction proceeded in protected areas and resulted in environmental damage (Gazaryan, 2010; Gazaryan and Shevchenko, 2014).

To some degree, these ecological costs should be expected: it is not possible to conduct massive construction projects in such delicate environments without deleterious impacts, particularly when working to meet an inflexible event deadline. This begs the question of why the games were bid for and awarded in the first place, given the almost unavoidable risks to the region's fragile environment. The most plausible explanation is that organizers prioritized the idea of developing Sochi's year-round tourist economy over protecting Sochi's natural environment. The *Lastochka* and New Krasnaya Polyana Highway epitomize these conflicting ideas, as the transit links were aimed at the tourist class and built with little consideration for the long-term transport needs of residents, nor for the care of the environment. That

Russian environmental protection laws were loosened in the run-up to the Olympics in order to facilitate these developments only underscores the importance of the Sochi tourist development idea to the minds of decision makers in Moscow.

Roads that provide and divide

Olga Sidorova holds her six-year-old daughter's hand and walks down the narrow sidewalk to the bus stop. They are in the village of Kazachiy Brod, across the river from Akhstyr, walking alongside the original arterial road that connects the mountains to the coast (see map 1). For the Olympics, the road was expanded and upgraded with barriers and streetlights. "The road is better now, but traffic was not so bad before," she says, as cars and trucks roar past. "There used to be cows and horses on this road, can you imagine?" They sit down on the bus stop bench to wait. There is a digital display that listed bus arrival times during the Olympics but it is not working anymore. Still, Olga knows the schedule and the bus arrives only a few minutes late. They enter and pay the driver – the fare is higher now than it was before the Games – and squeeze into the packed bus. A man gives up his seat and Olga sits with her daughter on her lap. The girl watches the small screen on the ceiling, where snippets of children's cartoons play in between streams of commercials. An automated voice announces the upcoming stops in Russian and English. In less than thirty minutes, Olga and her daughter have traveled all the way down the upgraded original road to the market in Adler.

Overall, attention paid to road infrastructure constitutes substantial improvements to the region's car-system, linking residents to tourist infrastructures, employment, and consumption opportunities (Whitelegg, 1997). The ability to connect to these infrastructures and networks generates increased affordances for residents, and can result in significant economic and population growth; on the contrary, if these transit networks bypass a settlement, this can lead to its decline or demise (Garrison et al., 1959). These divergent potential trajectories are illustrated by the routine travel experiences of people on opposite sides of the Mzymta River. There is a marked advantage in traveling to Adler from Kazachiy Brod as opposed to from Akhshtyr. In Kazachiy Brod, people have always enjoyed better access to both mountains and coast due to their proximity to the original arterial road, and Olympic-related improvements to this road have improved travel times. So even though the *marshrutki* minibus taxis that serviced the village before the Olympics have been removed and replaced by an insufficient number of buses, it is still possible to travel without a car. Travel is noticeably easier for residents who do have their own vehicles, though, and access to the New Krasnaya Polyana Highway on the Akhshtyr side of the river only increases their options.

Previously, before the Olympics were granted to Sochi, a regional project had replaced the old mountain road to Krasnaya Polyana with a larger highway and three new tunnels, cutting Kazachiy Brod's travel time from over two hours to under thirty minutes. This original road was further improved as part of Olympic preparations but, on top of this, Kazachiy Brod drivers were also given a new option. Now, drivers can start on the original road, cross the Mzymta on a new bridge, join up with the New Krasnaya Polyana Highway and dash up to the resorts in around twenty minutes.

The drive is beautiful, through verdant mountain gorges, and across a picturesque cable-stayed bridge. Because this highway was built to handle peak traffic during the Olympics, it is over capacity for the current needs of the region. The unexpected benefit for drivers, however, is that the highway is largely free from the traffic jams that often clog the roads down by the coast. The main problems with this new highway involve poor flow control, corrupt police, and lack of equitable access. In general, signage is poor and entering or exiting the highway can be dangerous. Combined with fast driving, light traffic, and no dividers for oncoming vehicles, this has led to so many collisions, injuries, and deaths that locals have dubbed it “the cursed highway.” The police maintain a regular presence to dissuade speeding, but they continue to solicit petty bribes from motorists. Finally, there are problems accessing the new highway in the first place. Thanks to the construction of new bridges, residents in Kazachiy Brod and other villages on the west side of the Mzymta have access to highways on both sides of the river. Due to the lack of adequate onramps on the east, however, Akhshtyr residents are largely excluded from either artery.

Akhshtyr is the northernmost eastern settlement along the Mzymta, and the residents there traditionally have been isolated by their position at the end of an old dirt road. At the beginning of Olympic development, the people in Akhshtyr were promised an onramp to access the new highway being built next to their homes, which could have connected their village to the wider region. Instead, despite protests, a court hearing, and international news coverage, this project was delayed and then canceled (Wolfe, 2013). The absence of a proper onramp has left the village more isolated than before,

since the highway and *Lastochka* rails cut residents off from their previous pedestrian route across the river to Kazachiy Brod. Combined with the environmental damage caused by Olympic construction, they continue to suffer years after the event. One resident, who has since relocated to Adler, said:

“The Olympics passed us by. They never built the onramp so we just drive on the old road. They cancelled the bus. There’s no store anymore. We still don’t have water and everyone has to buy 5 liter bottles. All we have is a quarry and a dump instead of a national park... They installed gas lines but you have to pay for hook up and it’s too expensive. I don’t know how anyone lives there anymore.” (Interview with former Akhshtyr resident, March 2017)

On the other side of the river, residents of Kazachiy Brod live substantially easier lives. Their material position – already superior to their neighbors due to the existence of the original road – has largely been improved by Olympic development. Gas lines have been extended here as well, and while figures for the village were not available, several residents confirmed that they paid the high hookup fees. Drinking water is available on tap and residents generally have enough, despite occasional shut-offs. Further, on the cliffs above Kazachiy Brod stands the Sochi Skypark, a new adventure tourism attraction that opened in 2014. People from all over Russia now come to cross what owners call the longest suspended pedestrian bridge in the world, and to experience Russia’s highest bungee jump, 170 meters above the Mzymta River. Tourists pass Kazachiy Brod in order to reach the Skypark and shop in the local stores, which have expanded in order to meet growing demand. While residents are not universally pleased by the influx of strangers, and nor could they be considered wealthy, their material circumstances nevertheless are much improved since the Olympics. New stores have opened, new houses are being built, and there are rumors

that the village's bumpy dirt roads might soon be paved. That Kazachiy Brod is thriving can be attributed to their easy access to two major transport arteries, and to the tourists, money, and opportunity engendered by this access. In contrast, Akhshtyr is cut off from both roads and is withering.

Restrictions on the rails

The New Krasnaya Polyana Highway is only part of the major transit intervention from the coast to the mountains. There is also the new *Lastochka* train that was built for the games. Railway mobility systems provide public connectedness, mobilizing people, blurring the lines between private and public spaces, and inducing profound temporal and regulatory changes in society (Thrift, 1990; Urry, 2007). As with roads, the fate of a settlement can be made or broken by its proximity to rail service, and the right to move through these connected places – and thereby to engage the subsequent social benefits such as improved connectivity, employment, and leisure – is contingent upon access. With train systems, access is dependent on the location of the rails, the shape of stations and platforms, the means of reaching these transit nodes, and of course on the trains themselves and on the schedules they maintain. Significant exclusions can occur if any of these elements is missing or obstructed.

The *Lastochka* system consists of nine stations, all built for the Olympics (see map 1). Arranged in a rough T-shape, the tracks run from downtown Sochi along the Black Sea coast to the Olympic park, with a trunk heading up to the two resort stations in the mountains. There is also a short spur that connects the Adler station to the airport.

The areas linked by the new stations are significant. Adler and Khosta – two of Sochi’s municipal subregions – are now connected via *Lastochka* to central Sochi. These are all tied into the tourist hotspots of the Olympic park and the mountain resorts. In this way, tourists who come to Sochi by train could transfer from the central station downtown or from the subregional train stations and wind up easily at a hotel in either of the Olympic clusters. Likewise, tourists arriving by air can walk from the terminal to the airport *Lastochka* station. However, that the airport is located on a spur line creates inconvenience from the outset, as air travelers are forced to transfer in Adler to the main lines and their destination. This makes them dependent on the smooth operation of a regular train schedule to make their transfer. Overlooking that problem for the moment, the *Lastochka* trains are modern, clean, and quiet, and would not look out of place in Western Europe. At the outset, the system was a point of pride for many locals – a sign that Sochi was becoming a world-class destination. In theory, the *Lastochka* system could have remained after the Olympics as a mass transportation system for the overall benefit of the region, as was the case in post-Olympic Sydney and Athens (Kassens-Noor, 2013b). In the legacy period, however, major problems with the train have come to light.

The first problem with the *Lastochka* system occurred not long after the Olympic closing ceremonies, as train service was cut due to intergovernmental squabbles over regulations and ownership of debt (Müller, 2014). The immediate result was such a severe reduction in service as to make the system practically unusable. Though this dispute has since been resolved, the *Lastochka* train remains plagued by irregular service and undependable schedules. Schedule information online is often contradictory and confusing, and does not always correspond to the actual presence of

trains. In 2017, an attempt to buy a ticket from Adler station to the resorts in Roza Khutor was thwarted by a five-hour wait for the next train, and the counter attendant suggested that the author take a bus instead. Facing this predicament, tourists to Sochi often avoid the inconvenience of the train and make use of local buses instead. It is not uncommon to see Sochi residents commuting to work, crammed in a single bus alongside tourists with their snowboards, all while the multi-billion dollar train remains underused.

Aside from the irregular, unpredictable service – which in principle is a fixable problem – the second issue with the *Lastochka* is that the stations themselves are not located in areas that best serve the local population. Instead, the system is targeted at bringing visitors from transit hubs to tourist destinations. The majority of *Lastochka* stations are sited at already existing train stations, which are not convenient to where most people live. There are also buses waiting at the train stations, and since *Lastochka* tickets cost twice that of a bus, it is easier in nearly every situation to avoid the train entirely. For locals, who might live far from the train stations, there is little sense in going out of one's way – and paying higher prices as well – to take the *Lastochka*. There is a tremendous missed opportunity for the region's post-Olympics legacy, exemplified by Akhshtyr, Kazachiy Brod, and the other villages by the Mzymta. A *Lastochka* station on the river, at a point somewhere midway between the Olympic clusters, could have served as a lifeline for villagers who do not, cannot, or would prefer not to drive, including the elderly and the youth. It would relieve pressure on the buses and reconnect Akhshtyr to the rest of the region. Aside from the river communities, there are numerous other underserved districts in Sochi that could benefit from connection to a well-run local rail system. Organizers did not appear to

favor this version of legacy, though, as their plans centered on making the Sochi region attractive for tourists, with apparently little thought given to providing rail access that would serve the local population.

The third problem with the *Lastochka* system involves the ecological damage wrought during construction. This damage was immense and sustained over a period of years, as pylons for the road and rail were built alongside and in the Mzymta River. Chemical and construction waste was discharged into the river several times, with walls of toxic white foam washing downstream past Akhstyr and Kazachiy Brod, past Adler and into the Black Sea (EWNC, 2011b; Titov, 2011). Construction activity polluted the water so severely that nearly all fish life was extinguished from the river, a loss accounting for nearly 20% of the region's endangered Black Sea salmon (WWF, 2013). Driven by local environmental activists, this ecological damage – which by no means was limited only to the Mzymta – attracted national and international attention. In 2010, the United Nations Environment Program submitted a report to the Russian federal government that outlined some of the environmental damage already occurring in the Sochi Olympic construction project. By 2011, the Russian government organized stakeholders in the project to sign a declaration committing themselves to 17 environmental projects, including a restoration of the Mzymta River basin (UNEP, 2011). This restoration was touted as one of the environmental legacies of the Sochi Olympics, while quietly ignoring the fact that the restoration was only necessary due to Olympic construction in the first place.

Five years after the Games, several species of fish have been reintroduced into the Mzymta, but the river environment still had not recovered and locals do not swim

anymore, though tourists do participate in rafting. “I do not swim [in the river] since the foam,” said a Kazachiy Brod resident. “Before, we used to come here all the time every summer.” The riverbank where residents used to swim has been transformed into an exit point for the rafting tours, complete with a café and loudspeakers for music. Construction debris - large concrete blocks and rusted rebar – litters the riverbank. A sign has been hammered into the ground beside the broken concrete: No Fires, No Picnics, No Swimming.

Ecological destruction has continued even after the Olympics, as developers pushed to expand the mountain resorts. In 2018, local environmental groups protested these expansions, arguing that more construction would further damage the protected natural areas (Greenpeace Russia, 2018). UNESCO has threatened to rescind its natural world heritage site classification and recategorize the region as endangered (Chernikh and Nikitina, 2018). This continuing environmental destruction can be understood as a different kind of Olympic legacy, a byproduct of the processes in which mega-events serve to open previously closed territories to neoliberal globalization (Horne, 2015; Trubina, 2014).

Instead of linking the city for the long-term benefit of residents, the *Lastochka* train was built to service the short-term needs of the Olympics, with the goal of serving tourists in the post-games period – as indicated by the sparse location of stations. With service cut immediately after the Olympics, however, and undependable schedules even years after the games, the *Lastochka* system remains something of an oddity. In contrast to most mega-event related transport projects, it is a transport white

elephant: overpriced, underserviced and underused, and caused profound ecological damage as well.

Conclusion: a playground for tourists

Hosting mega-events transforms places and people, linking them to global processes of capitalist modernity (Roche, 2006, 2000). The Sochi Olympics follow this trend, opening up previously closed territories with promises of economic bonanzas amid the goal of transforming the region into a year-round tourist paradise (Baade and Matheson, 2015, 2016; Sochi 2014 Organizing Committee, 2006). A crucial part of this promise involved the construction and improvement of transport infrastructure in order to circulate visitors from transit hubs to hotels, resorts, shops, nightclubs, and other tourist spots. These infrastructures are part of the material legacy of Sochi's transformation towards globalized leisure capitalism. In the bid book, organizers claim that this improved transport infrastructure would benefit the local population in the long term, and indeed, much popular and government discourse in the post-event period highlights these achievements. At the same time, in focusing on expanded and upgraded transit systems, this discourse often elides the selective, exclusionary, and ecologically damaging effects of the Sochi project. These inequalities are exemplified by the construction of the new Sochi road and rail, whose legacy is mixed and controversial.

Host nations around the world have tried to use mega-events as a key to unlock processes of global leisure capitalism. Though the attempts are similar across the globe, what happens once these spaces are opened is not universal, but rather locally contingent. In Sochi this took the shape of building new resort cities in the previously

protected mountain forests and constructing the new road and rail to connect them with the coast. At a more micro level, it meant building a bungee jump bridge across the previously undeveloped mountaintops above Kazachiy Brod, and rafting down the poisoned Mzymta River. This transformative opening had consequences on local communities who were ignored in the rush to turn Sochi into a year-round resort, and to complete required projects by the mega-event deadline.

The result of overlooking local communities is that while the road infrastructure from the coast to the mountains has been improved and expanded, access to these improvements is not equal, and many residents – particularly in the cut-off community of Akhshtyr – cannot enjoy the benefits of Olympic transformation. Moreover, doubts have arisen in the post-event years about the quality of these road works overall, after heavy rains resulted in catastrophic flooding due to the lack of adequate drainage – a situation that raises questions about the long-term benefits even for those who can access the roads. The *Lastochka* system, meanwhile, successfully ignores residents on both sides of the river, and largely ignores the local population of Sochi as a whole. With stations positioned at areas that benefit tourists, the entire system is designed for visitors rather than locals. Even here, however, the system fails to provide, as the irregular service and an awkward connection to the airport push tourists to use local buses instead.

Still, visitors come to Sochi in summer and winter from all over Russia, and the increased economic activity has been substantial, buoying Sochi and the region to such a degree that, overall, unemployment has fallen, incomes have risen, and many indicators of quality of life are improving (Nureev et al., 2014). Sochi is portrayed as

– and in many ways has in fact become – Russia’s year-round playground, and the achievements of this project should not be overlooked. At the same time, the social and environmental impacts of developments in general and the road and rail project in particular, continue to reverberate through the region. And so it is that Olga Sidorova, with her child in the back seat, carefully drives down Kazachiy Brod’s bumpy road in her new Mitsubishi. At the bottom of the hill, she waits for a space between the buses of tourists and the huge construction trucks racing up the highway to the mountains. Beyond the road, she ignores the *Lastochka* train gliding silently on its tracks, and at this distance it is impossible to see if the train is empty or full.

Literature

- Anti-Corruption Foundation, 2014. Sochi 2014: Encyclopedia of spending. The Cost of Olympics Report by the Anti-Corruption Foundation.
- Baade, R., Matheson, V., 2015. An Analysis of Drivers of Mega-Events in Emerging Economies. Econ. Dep. Work. Pap.
- Baade, R.A., Matheson, V.A., 2016. Going for the Gold: The Economics of the Olympics. J. Econ. Perspect. 30, 201–218. <https://doi.org/10.1257/jep.30.2.201>
- Bovy, P., 2010. “No Transport White Elephants”: Mobility Planning for Mega-events. ITS Mag. - Mag. Intell. Traffic Syst. 16–18.
- Brunet, F., 1995. An economic analysis of the Barcelona’92 Olympic Games: resources, financing and impact, in: de Moragas, M., Botella, M. (Eds.), The Keys to Success: The Social, Sporting, Economic and Communications Impact of Barcelona ’92. Centre d’Estudis Olímpics i de l’Esport, Barcelona, pp. 203–237.
- Cantarelli, C.C., Flybjerg, B., Molin, E.J.E., van Wee, B., 2010. Cost overruns in Large-Scale Transportation Infrastructure Projects: Explanations and Their Theoretical Embeddedness. Eur. J. Transp. Infrastruct. Res. 10, 5–18.
- Cashman, R., 2006. The bitter-sweet awakening: the legacy of the Sydney 2000 Olympic Games. Walla Walla Press, Sydney.
- Chappelet, J.-L., 2008. Olympic Environmental Concerns as a Legacy of the Winter Games. Int. J. Hist. Sport 25, 1884–1902. <https://doi.org/10.1080/09523360802438991>
- Chernikh, A., Nikitina, O., 2018. UNESCO otsenilo ugrozu 'Zapadnomu Kavkazu" [UNESCO estimates the threat to the Western Caucasus] ЮНЕСКО оценило угрозу «Западному Кавказу» [WWW Document]. Kommers. № 112 6350. URL <https://www.kommersant.ru/doc/3670894> (accessed 7.5.18).
- Coaffee, J., 2010. Urban Regeneration and Renewal, in: Gold, J.R., Gold, M.M. (Eds.), Olympic Cities: City Agendas, Planning, and the World’s Games. Routledge, London, pp. 180–193.

- COHRE, 2007. Fair Play for Housing Rights: Mega-events, Olympic Games and Housing Rights : Opportunities for the Olympic Movement and Others. Centre on Housing Rights and Evictions (COHRE).
- Essex, S., Chalkley, B., 2004. Mega-sporting events in urban and regional policy: a history of the Winter Olympics. *Plan. Perspect.* 19, 201–204. <https://doi.org/10.1080/0266543042000192475>
- Essex, S., Chalkley, B., 1998. Olympic Games: catalyst of urban change. *Leis. Stud.* 17, 187–206. <https://doi.org/10.1080/026143698375123>
- EWNC, 2011a. EWNC raises international concern about the environmental impact of Sochi 2014 Olympics [WWW Document]. URL <http://www.governance.bsnn.org/pdf/RU2.pdf> (accessed 7.1.18).
- EWNC, 2011b. Sochinskaya reka Mzymta vnov otravlena stokami s olimpiiskogo obekta [Sochi’s Mzymta river poisoned once again by from the Olympic facilities] Сочинская река МЗЫМТА ВНОВЬ ОТРАВЛЕНА СТОКАМИ С ОЛИМПЕЙСКОГО ОБЪЕКТА | ЭКОЛОГИЧЕСКАЯ ВАХТА ПО СЕВЕРНОМУ КАВКАЗУ [WWW Document]. URL <http://ewnc.org/node/7710> (accessed 7.1.18).
- Flyvbjerg, B., Holm, M.K.S., Buhl, S.L., 2004. What Causes Cost Overrun in Transport Infrastructure Projects? *Transp. Rev.* 24, 3–18. <https://doi.org/10.1080/0144164032000080494a>
- Flyvbjerg, B., Holm, M.K.S., Buhl, S.L., 2003. How common and how large are cost overruns in transport infrastructure projects? *Transp. Rev.* 23, 71–88. <https://doi.org/10.1080/01441640309904>
- Flyvbjerg, B., Stewart, A., Budzier, A., 2016. The Oxford Olympics Study 2016: Cost and Cost Overrun at the Games (SSRN Scholarly Paper No. ID 2804554). Social Science Research Network, Rochester, NY.
- Gaffney, C., 2015. Gentrifications in pre-Olympic Rio de Janeiro. *Urban Geogr.* 0, 1–22. <https://doi.org/10.1080/02723638.2015.1096115>
- Gaffney, C., 2010. Mega-events and socio-spatial dynamics in Rio de Janeiro, 1919-2016. *J. Lat. Am. Geogr.* 9, 7–29. <https://doi.org/10.1353/lag.0.0068>
- Garrison, W.L., Berry, B.J., Marble, D.F., Nystuen, J.D., Morrill, R.L., 1959. *Studies of Highway Development and Geographic Change*. University of Washington Press, Seattle.
- Gazaryan, S., 2010. Sovmeshennaya doroga “Adler-Krasnaya Polyana” unichtozhila mzimtinsky samshitovy les [The combined “Adler-Krasnaya Polyana” road destroyed Mzymta’s boxwood forests] [WWW Document]. *Environ. Watch North Cauc.* URL <http://www.ewnc.org/node/5634>
- Gazaryan, S., Shevchenko, D., 2014. Sochi-2014: independent environmental report.
- Gold, J.R., Gold, M.M., 2016. *Olympic Cities: City Agendas, Planning, and the World’s Games, 1896 – 2020*, 3rd edition. ed. Routledge, London ; New York.
- Golubchikov, O., 2017. From a sports mega-event to a regional mega-project: the Sochi winter Olympics : and the return of geography in state development priorities. *Int. J. Sport Policy Polit.* 0, 1–19. <https://doi.org/10.1080/19406940.2016.1272620>
- Greenpeace Russia, 2018. Greenpeace i WWF prosyat UNESCO ne dopustit razrusheniya mirovovo naslediya na Kavkaze i v Komi [Greenpeace and the WWF ask UNESCO not to allow the destruction of the world heritage of the Caucasus] [WWW Document]. URL <http://m.greenpeace.org/russia/ru/high/news/2018/28-06-Greenpeace-WWF-Unesco/> (accessed 7.5.18).
- Hiller, H., 2000. Mega-events, Urban Boosterism and Growth Strategies: An Analysis of the Objectives and Legitimations of the Cape Town 2004 Olympic Bid. *Int. J. Urban Reg. Res.* 24, 449–458. <https://doi.org/10.1111/1468-2427.00256>

- Horne, J., 2015. Assessing the sociology of sport: On sports mega-events and capitalist modernity. *Int. Rev. Sociol. Sport* 50, 466–471.
<https://doi.org/10.1177/1012690214538861>
- Horne, J., Manzenreiter, W., 2006. An introduction to the sociology of sports mega-events. *Sociol. Rev.* 54, 1–24. <https://doi.org/10.1111/j.1467-954X.2006.00650.x>
- International Olympic Committee, 2016. Host City Contract. Operational Requirements.
- IOC, 1999. Olympic Movement's Agenda 21: Sport for Sustainable Development.
- Kassens-Noor, E., 2013a. Transport Legacy of the Olympic Games, 1992–2012. *J. Urban Aff.* 35, 393–416. <https://doi.org/10.1111/j.1467-9906.2012.00626.x>
- Kassens-Noor, E., 2013b. Managing Transport During the Olympic Games, in: Frawley, S., Adair, D. (Eds.), *Managing the Olympics*. Palgrave Macmillan, Houndmills, Basingstoke, Hampshire ; New York, pp. 127–146.
- Kassens-Noor, E., 2012. *Planning Olympic Legacies: Transport Dreams and Urban Realities*, 1 edition. ed. Routledge, Abingdon, Oxon ; New York.
- Müller, M., 2015. The Mega-Event Syndrome: Why So Much Goes Wrong in Mega-Event Planning and What to Do About It. *J. Am. Plann. Assoc.* 81, 6–17.
<https://doi.org/10.1080/01944363.2015.1038292>
- Müller, M., 2014. After Sochi 2014: costs and impacts of Russia's Olympic Games. *Eurasian Geogr. Econ.* 55, 628–655.
<https://doi.org/10.1080/15387216.2015.1040432>
- Nureev, R.M., Markin, E.V., Grechkin, M.A., 2014. XXII Olimpiiskie zimnie igri 2014g. v Sochi: pervie itogi [The 22nd Winter Olympic Games in Sochi 2014: Initial Results]. *J. Econ. Regul.* 5, 14–32.
- O'Hara, M., 2015. 2014 Winter Olympics in Sochi: An Environmental and Human Rights Disaster. *State Environ. Migr.* 2015.
- OlympStroy, 2013. Olympstroy - O Korporatsii [About the Company] [WWW Document]. URL
<https://web.archive.org/web/20130904234007/http://www.sc-os.ru:80/ru/about/> (accessed 2.5.18).
- Petrova, Y., Myazina, E., 2013. Sochi izbavyat ot probok po retseptu Moskvi [Sochi will do away with traffic by following Moscow's lead] [WWW Document]. URL
<https://www.vedomosti.ru/business/articles/2013/11/14/ischeznut-li-probki-v-sochi> (accessed 7.12.18).
- Poynter, G., Viehoff, V., Li, Y., 2015. *The London Olympics and Urban Development: The Mega-Event City*. Routledge, Abingdon, Oxon; New York.
- Preuss, H., 2004. *The Economics of Staging the Olympics: A Comparison of the Games, 1972-2008*. Edward Elgar Publishing, Cheltenham, UK ; Northampton, MA, US.
- Putin, V., 2007. Speech at the 119th International Olympic Committee session [WWW Document]. *Kremlin.ru*. URL
<http://en.kremlin.ru/events/president/transcripts/24402>
- Roche, M., 2006. Mega-events and modernity revisited: globalization and the case of the Olympics. *Sociol. Rev.* 54, 27–40.
- Roche, M., 2000. *Mega-events and modernity*. Routledge, London.
- Russian Federal Government, 2006. O federalnoi tselevoi programme "Razvitiya goroda Sochi kak gornoklimaticheskogo kurorta (2006-2014 godi)" [Federal target program for the development of Sochi as a mountain climate resort, 2006-2014] [WWW Document]. URL
<http://pravo.gov.ru/proxy/ips/?docview&page=1&print=1&nd=102108469&rdk=3&&empire=> (accessed 10.26.16).

- Sochi 2014 Organizing Committee, 2015. Official Report: Sochi 2014 Olympic Winter Games. The Organizing Committee of the XXII Olympic Winter Games and XI Paralympic Winter Games of 2014 in Sochi. Moscow, Sochi.
- Sochi 2014 Organizing Committee, 2006. Sochi 2014 Candidature File: Gateway to the Future. The Organizing Committee of the XXII Olympic Winter Games and XI Paralympic Winter Games of 2014 in Sochi., Moscow.
- Telichenko, V.I., Benuzh, A.A., 2014. Sovershenstvovanie printsipov ustoichivovo razvitiya na osnove opita primeneniya “zelyonikh” standartov pri stroitelstve olimpiiskikh obektov v Sochi [Improvement of the principles of sustainable development based on the experiences of introducing “green” standards during the construction of olympic facilities in Sochia]. *Promishlennoe Grazhdanskoe Stroitelstvo*. 40–43.
- Thrift, N., 1990. The Making of a Capitalist Time Consciousness, in: Hassard, J. (Ed.), *The Sociology of Time*. Palgrave Macmillan, New York, pp. 105–129.
- Titov, E., 2011. Ekologicheskaya katastrofa na Mzymte mozhet ostavit Sochi bez pitevoi vodi [Ecological catastrophe on the Mzymta may leave Sochi without drinking water] [WWW Document]. *Новая Газета - Novayagazeta.ru*. URL <https://www.novayagazeta.ru/news/2011/08/20/49925-ekologicheskaya-katastrofa-na-mzymte-mozhet-ostavit-sochi-bez-pitievoy-vody> (accessed 7.1.18).
- Toohey, K., Veal, A.J., 2007. *The Olympic Games: A Social Science Perspective*. CABI, Wallingford ; Cambridge.
- Trubina, E., 2014. Mega-events in the context of capitalist modernity: the case of 2014 Sochi Winter Olympics. *Eurasian Geogr. Econ.* 55, 610–627. <https://doi.org/10.1080/15387216.2015.1037780>
- UNEP, 2011. Sochi’s 2014 Winter Olympics turn green, adopting UN-backed plans [WWW Document]. *UN News*. URL <https://news.un.org/en/story/2011/03/369992-sochis-2014-winter-olympics-turn-green-adopting-un-backed-plans> (accessed 7.1.18).
- UNEP, 2008. Russia to relocate Olympic sites after UN expresses environmental concerns [WWW Document]. *UN News*. URL <https://news.un.org/en/story/2008/07/265442-russia-relocate-olympic-sites-after-un-expresses-environmental-concerns> (accessed 7.5.18).
- Urry, J., 2007. *Mobilities*. Polity, Cambridge; Malden.
- Watt, P., 2013. ‘It’s not for us.’ *City* 17, 99–118. <https://doi.org/10.1080/13604813.2012.754190>
- Whitelegg, J., 1997. *Critical Mass: Transport, Environment and Society in the Twenty-first Century*. Pluto Press, London ; Chicago.
- Wolfe, S.D., 2016. A silver medal project: the partial success of Russia’s soft power in Sochi 2014. *Ann. Leis. Res.* 19, 481–496. <https://doi.org/10.1080/11745398.2015.1122534>
- Wolfe, S.D., 2013. Life On The Ground: A Comparative Analysis of Two Villages in Sochi During Olympic Transformation. *Euxeinos - Online J. Cent. Gov. Cult. Eur.* 12/2013, 36–46.
- Wolfe, S.D., Müller, M., 2018. Crisis Neopatrimonialism: Russia’s new political economy and the 2018 World Cup. *Probl. Post-Communism* 65, 101–114. <https://doi.org/10.1080/10758216.2018.1429934>
- WWF, 2013. Olympiada-2014 v gorode Sochi: oshibki olimpiada [2014 Olympics in Sochi: the mistakes of the Olympics] [WWW Document]. *WWFru - Всемирный Фонд Дикой Природы*. URL <https://wwf.ru/about/positions/sochi2014/> (accessed 7.1.18).